

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF IOWA
EASTERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

v.

THE GILLETTE COMPANY

Defendant.

Civil Action No. C 06-1016

Judge _____

CONSENT DECREE

I. BACKGROUND

A. The United States of America ("United States"), on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), filed a complaint in this matter pursuant to Section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9607, as amended ("CERCLA"), seeking reimbursement of response costs incurred for response actions taken at or in connection with the release or threatened release of hazardous substances at the Former Frith Battery Dump Site in Sageville, Dubuque County, Iowa ("the Site").

B. The defendant that has entered into this Consent Decree ("Settling Defendant") does not admit any liability to Plaintiff arising out of the transactions or occurrences alleged in the Complaint.

C. The United States and Settling Defendant agree, and this Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith, that settlement of this matter will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

THEREFORE, with the consent of the Parties to this Decree, it is ORDERED, ADJUDGED, AND DECREED:

II. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345 and 42 U.S.C. §§ 9607 and 9613(b) and also has personal jurisdiction over Settling Defendant. Settling Defendant consents to and shall not challenge entry of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

III. PARTIES BOUND

2. This Consent Decree is binding upon the United States and upon Settling Defendant and its successors and assigns. Any change in ownership or corporate or other legal status, including but not limited to, any transfer of assets or real or personal property, shall in no way alter the status or responsibilities of Settling Defendant under this Consent Decree.

IV. DEFINITIONS

3. Unless otherwise expressly provided herein, terms used in this Consent Decree which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Consent Decree or in any appendix attached hereto, the following definitions shall apply:

a. "Action Memorandum" shall mean the EPA Action Memorandum relating to the Former Frith Superfund Site signed on July 7, 2000 by the Superfund Division Director, EPA Region VII, or his/her delegatee, and all attachments thereto, and attached as Appendix A.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, *et seq.*

c. "Consent Decree" shall mean this Consent Decree and all appendices attached hereto. In the event of conflict between this Consent Decree and any appendix, the Consent Decree shall control.

d. "Covered Matters" shall mean liability for all costs, including but not limited

to direct and indirect costs, that EPA or DOJ has incurred or paid at or in connection with the time-critical removal action performed pursuant to the Action Memorandum for the Former Frith Battery Dump Superfund Site.

e. "Day" shall mean a calendar day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

f. "DOJ" shall mean the United States Department of Justice and any successor departments, agencies or instrumentalities of the United States.

g. "EPA" shall mean the United States Environmental Protection Agency and any successor departments, agencies or instrumentalities of the United States.

h. "EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

i. "Interest" shall mean interest at the current rate specified for interest on investments of the Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a).

j. "Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral or an upper or lower case letter.

k. "Parties" shall mean the United States and the Settling Defendant.

l. "Past Response Costs" shall mean the direct and indirect costs that EPA or DOJ has incurred or paid at or in connection with the time-critical removal action performed pursuant to the Action Memorandum for the Former Frith Battery Dump Superfund Site, including any accrued interest, through the date of entry of this Consent Decree.

m. "Plaintiff" shall mean the United States.

n. "Section" shall mean a portion of this Consent Decree identified by a roman numeral.

o. "Settling Defendant" shall mean The Gillette Company on its own behalf and as successor to General Dry Batteries, Inc., P.R. Mallory & Company, Inc. And Duracell, Inc..

p. "Site" shall mean the Former Frith Battery Dump Superfund site, encompassing approximately two acres, located at 11399 Route 52 North in Sageville, Dubuque County, Iowa, and depicted more clearly on the map included in Appendix B.

q. "United States" shall mean the United States of America, including its departments, agencies and instrumentalities.

V. REIMBURSEMENT OF PAST RESPONSE COSTS

4. Payment of Past Response Costs to the EPA Hazardous Substance Superfund. Within 30 days of entry of this Consent Decree, Settling Defendant shall pay to the EPA Hazardous Substance Superfund \$750,000 in reimbursement of Past Response Costs. Payment shall be made by FedWire Electronic Funds Transfer ("EFT") to EPA Region VII, Account No. 910-9125, ABA 043000261 (wire transit routing No.), referencing USAO File Number 2005V00666, the EPA Region and Site Spill ID Number A750 and DOJ Case Number 90-11-2-08217. Any payments received by the Department of Justice after 4:00 p.m. Eastern Time shall be credited on the next business day. Settling Defendant shall send notice to EPA and DOJ that payment has been made in accordance with Section XI (Notices and Submissions).

VI. FAILURE TO COMPLY WITH REQUIREMENTS OF CONSENT DECREE

5. Interest on Late Payments. In the event that the payment required by Section V (Reimbursement of Past Response Costs) or Section VI, Paragraph 6 (Stipulated Penalty), are not received when due, Interest shall continue to accrue on the unpaid balance through the date of payment.

6. Stipulated Penalty.

a. If any amounts due to EPA under this Consent Decree are not paid by the required date, Settling Defendant shall pay to EPA as a stipulated penalty, in addition to the Interest required by Paragraph 5, \$5000 per violation per day that such payment is late.

b. Stipulated penalties are due and payable within 30 days of the date of the demand for payment of the penalties by EPA. All payments to EPA under this Paragraph shall be made by certified or cashier's check made payable to "EPA Hazardous Substance Superfund" and shall be sent to:

Mellon Bank, EPA Region VII Superfund
P. O. Box 371099M
Pittsburgh, Pennsylvania 15251

All payments shall indicate that the payment is for stipulated penalties and shall reference the name and address of the party making payment, the EPA Region and Site ID A750, USAO File Number 2005V00666, and DOJ Case Number 90-11-2-08217. Copies of checks paid pursuant to this Paragraph, and any accompanying transmittal letter[s], shall be sent to EPA and DOJ as provided in Section XI (Notices and Submissions).

c. Penalties shall accrue as provided in this Paragraph regardless of whether EPA has notified Settling Defendant of the violation or made a demand for payment, but need only be paid upon demand. All penalties shall begin to accrue on the day the delinquent payment was due and shall continue to accrue through the date of payment. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate failures to make payments under this Consent Decree.

7. If the United States brings an action to enforce this Consent Decree, Settling Defendant shall reimburse the United States for all costs of such action, including but not limited to costs of attorney time.

8. Payments made under Paragraphs 5-7 shall be in addition to any other remedies or sanctions available to Plaintiff by virtue of Settling Defendant's failure to comply with the requirements of this Consent Decree.

9. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive payment of any portion of the stipulated penalties or interest that have accrued pursuant to this Consent Decree.

VII. COVENANT NOT TO SUE AND RESERVATIONS OF RIGHTS BY PLAINTIFF

10. Covenant Not to Sue by United States. Except as specifically provided in Paragraph 12 (Reservation of Rights by United States), the United States covenants not to sue Settling Defendant pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), for Covered Matters. This covenant not to sue shall take effect upon receipt by EPA of all payments required by Section V, Paragraph 4 (Payment of Past Response Costs to the EPA Hazardous Substance Superfund) and Section VI, Paragraphs 5 (Interest on Late Payments) and 6(a). This covenant not to sue is conditioned upon the satisfactory performance by Settling Defendant of its obligations under this Consent Decree. This covenant not to sue extends only to Settling Defendant and does not extend to any other person.

11. Reservation of Rights by United States. The covenant not to sue set forth in Paragraph 10 does not pertain to any matters other than those expressly specified therein. The United States reserves, and this Consent Decree is without prejudice to, all rights against Settling Defendant with respect to all other matters, including but not limited to:

- a. liability for failure of Settling Defendant to meet a requirement of this Consent Decree;
- b. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- c. criminal liability;
- d. liability for injunctive relief or administrative order enforcement under Section 106 of CERCLA, 42 U.S.C. § 6906; and
- e. liability for costs incurred or to be incurred by the United States that are not within the definition of Past Response Costs.

VIII. COVENANT NOT TO SUE BY SETTLING DEFENDANT

12. Settling Defendant covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to Covered

Matters or this Consent Decree, including but not limited to:

- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claim arising out of response actions at the Site for which the Past Response Costs were incurred; and
- c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to Covered Matters.

13. Nothing in this Consent Decree shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. 300.700(d).

IX. EFFECT OF SETTLEMENT/CONTRIBUTION PROTECTION

14. Nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto.

15. The Parties agree, and by entering this Consent Decree this Court finds, that Settling Defendant is entitled, as of the effective date of this Consent Decree, to protection from contribution actions or claims as provided by Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), for Covered Matters.

16. Settling Defendant agrees that, with respect to any suit or claim for contribution brought by it for matters related to this Consent Decree, it will notify EPA and DOJ in writing no later than 60 days prior to the initiation of such suit or claim. Each Settling Defendant also agrees that, with respect to any suit or claim for contribution brought against it for matters related to this Consent Decree, it will notify EPA and DOJ in writing within 10 days of service of the

complaint or claim upon it. In addition, each Settling Defendant shall notify EPA and DOJ within 10 days of service or receipt of any Motion for Summary Judgment, and within 10 days of receipt of any order from a court setting a case for trial, for matters related to this Consent Decree.

17. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other relief relating to the Site, Settling Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the Covenant Not to Sue by Plaintiff set forth in Section VII.

X. RETENTION OF RECORDS

18. Until ten (10) years after the entry of this Consent Decree, the Settling Defendant shall preserve and retain all records and documents now in its possession or control, or which come into its possession or control, that relate in any manner to response actions taken at the Site or the liability of any person for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary.

19. After the conclusion of the document retention period in the preceding paragraph, Settling Defendant shall notify EPA and DOJ at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA or DOJ, Settling Defendant shall deliver any such records or documents to EPA. Settling Defendant may assert that certain documents, records, or other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Settling Defendant asserts such a privilege, it shall provide Plaintiff with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document,

record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted. However, no documents, reports, or other information created or generated pursuant to the requirements of this consent decree shall be withheld on the grounds that they are privileged. If a claim of privilege applies only to a portion of a document, the document shall be provided to Plaintiff in redacted form to mask the privileged information only. Settling Defendant shall retain all records and documents that they claim to be privileged until the United States has had a reasonable opportunity to dispute the privilege claim and any such dispute has been resolved in the Settling Defendant's favor.

20. By signing this Consent Decree, the Settling Defendant certifies that, to the best of its knowledge and belief, it has:

a. conducted a thorough, comprehensive, good faith search for documents, and has fully and accurately disclosed to EPA, all information currently in its possession, or in the possession of its officers, directors, employees, contractors or agents, which relates in any way to the ownership, operation or control of the Site, or to the ownership, possession, generation, treatment, transportation, storage or disposal of a hazardous substance, pollutant or contaminant at or in connection with the Site;

b. not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information relating to its potential liability regarding the Site, after notification of potential liability or the filing of a suit against the Settling Defendant regarding the Site; and

c. fully complied with any and all EPA requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e).

XI. NOTICES AND SUBMISSIONS

21. Whenever, under the terms of this Consent Decree, notice is required to be given or a document is required to be sent by one party to another, it shall be directed to the individuals at

the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States, EPA, DOJ, and Settling Defendant, respectively.

As to the United States:

J. Daniel Breedlove
Assistant Regional Counsel
U.S. Environmental Protection Agency
901 North Fifth Street
Kansas City, Kansas

As to DOJ:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice (DOJ #90-11-2-08217)
P.O. Box 7611
Washington, D.C. 20044-7611

As to EPA:

J. Daniel Breedlove
Assistant Regional Counsel
U.S. Environmental Protection Agency
901 North Fifth Street
Kansas City, Kansas

As to Settling Defendant:

Kevin Loftus, Esq.
Deputy General Counsel & Assistant Secretary
The Gillette Company
Prudential Tower Building
Boston, Massachusetts 02199-8004

XII. RETENTION OF JURISDICTION

22. This Court shall retain jurisdiction over this matter for the purpose of interpreting and enforcing the terms of this Consent Decree.

XIII. INTEGRATION/APPENDICES

23. This Consent Decree and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this

Consent Decree. The Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Consent Decree. The following appendices are attached to and incorporated into this Consent Decree: "Appendix A" is the Action Memorandum for the Site; and "Appendix B" is the map of the Site.

XIV. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

24. This Consent Decree shall be lodged with the Court for a period of not less than 30 days for public notice and comment. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. Settling Defendant consents to the entry of this Consent Decree without further notice.

25. If for any reason this Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of either party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

XV. EFFECTIVE DATE

26. The effective date of this Consent Decree shall be the date upon which it is entered by the Court.

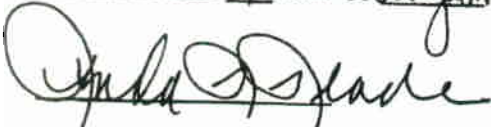
XVI. SIGNATORIES/SERVICE

27. The undersigned representative of the Settling Defendant to this Consent Decree and the Section Chief for the Environmental Enforcement Section of the Environment and Natural Resources Division of the United States Department of Justice certifies that he or she is authorized to enter into the terms and conditions of this Consent Decree and to execute and bind legally such Party to this document.

28. The Settling Defendant hereby agrees not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree, unless the United States has notified Settling Defendant in writing that it no longer supports entry of the Consent Decree.

29. The Settling Defendant shall identify, on the attached signature page, the name and

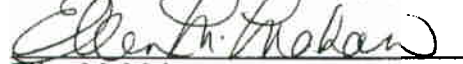
address of an agent who is authorized to accept service of process by mail on behalf of that Party with respect to all matters arising under or relating to this Consent Decree. Settling Defendant hereby agrees to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including but not limited to, service of a summons.

SO ORDERED THIS 17 DAY OF August, 2006

United States District Judge

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. The Gillette Company relating to the Former Frith Battery Dump Superfund Site.

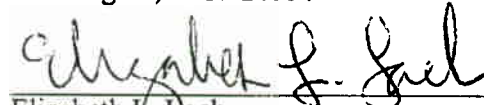
Date: June 6, 2006

FOR THE UNITED STATES OF AMERICA



Ellen M. Mahan
Deputy Section Chief
Environmental Enforcement Section
Environment and Natural Resources
Division

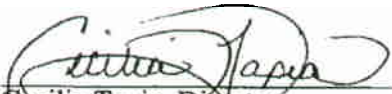
U.S. Department of Justice
Washington, D.C. 20530




Elizabeth L. Doeb
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
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CHARLES W. LARSON, SR.
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Cecilia Tapia, Director
Superfund Division
U.S. Environmental Protection Agency
901 North Fifth Street
Kansas City, Kansas 66101

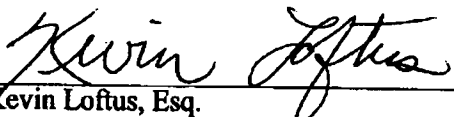


J. Daniel Breedlove
Assistant Regional Counsel
U.S. Environmental Protection Agency
901 North Fifth Street
Kansas City, Kansas 66101

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. The Gillette Company, relating to the Former Frith Battery Dump Superfund Site.

FOR DEFENDANT THE GILLETTE COMPANY

Date: 8-20-06


Kevin Loftus, Esq.
Deputy General Counsel and Assistant Secretary
The Gillette Company
Prudential Tower Building
Boston, MA 02199

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Kevin Loftus, Esq.
Deputy General Counsel and Assistant Secretary
The Gillette Company
Prudential Tower Building
Boston, MA 02199



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

7 JUL 2000

ACTION MEMORANDUM

SUBJECT: Request for a Removal Action at the Former Frith Battery Dump Site,
Sageville, Iowa

FROM: *DeAndre Singletary*
DeAndre Singletary, On-Scene Coordinator
EFLR/SUPR

TO: Michael J. Sanderson, Director
Superfund Division

Site ID#: A750
Category of Removal: Time-Critical
CERCLIS ID#: IASFN0703534
Nationally Significant/Precedent Setting: No

I. PURPOSE

The purpose of this action memorandum is to request and document approval and funding to conduct a time-critical removal action for the Former Frith Battery Dump Site located at 11399 Route 52 North in Sageville, Iowa 52001. The removal action will include the excavation, treatment, and disposal of lead-contaminated soil and materials.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal site evaluation

In April 1999, the Iowa Department of Natural Resources (IDNR) conducted the Initial Site Investigation of the former battery dump site after receiving an anonymous complaint about the site. The investigation revealed an area, approximately an acre in size, that was lacking vegetation and was approximately 85% covered with battery cores. The soil was black in the area of the battery cores. Plastic items found in the vicinity of the cores appeared to be deteriorating, possibly due to unknown site-specific conditions. Soil and surface water samples were collected by IDNR during the visit. Analytical results of the soil samples detected concentrations of lead up to 17,000 milligrams per kilogram (mg/kg), zinc up



to 98,000 mg/kg, manganese up to 310,000 mg/kg, and arsenic up to 270 mg/kg. Toxicity Characteristic Leaching Procedure (TCLP) analysis for lead revealed a concentration of 16 milligrams per liter (mg/l).

In July 1999, IDNR conducted an Extended Site Screening at the site. Soil, sediment, and on-site ground water samples were collected. Analytical results from the soil samples detected lead up to 1500 mg/kg, zinc up to 100,000 mg/kg, manganese up to 1,800 mg/kg, and arsenic up to 180 mg/kg. A sediment sample was collected approximately 2 feet from the shoreline of an on-site pond. Battery casings were present in the sample. The result of the sediment sample analysis were: lead 3,900 mg/kg; zinc 160,000 mg/kg; manganese 24,000 mg/kg; and arsenic 110 mg/kg.

2. Physical location

The Former Frith Battery Dump Site is located at 11399 Route 52 North. The legal description is SW 1/4, Section 2, T89N, R2E. The site is located north of Dubuque, IA within a flood plain identified as Couler Valley. The nearest off-site private residences are located 400 feet east on the bluff above the flood plain. An estimated 1,686 people live within one-mile of the site (0-1/4 mile, 65 people); (1/4-1/2 mile, 240 people); (1/2-1 mile, 1,381 people).

3. Site characteristics

The Former Frith Battery Dump Site is located at 11399 Route 52 North in Dubuque County in Sageville, Iowa, just outside of the city of Dubuque. The site is the location of a disposal area for batteries. It is unknown at this time how or when the batteries were placed at the site. The site property was acquired by E.E. Frith, the owner of Frith's Rendering Works, in May 1937. E.E. Frith owned the property until October 1965, when Donald Hess, vice-president of Dubuque By-Products (another on-site business), became the owner. Donald Hess, et al., then sold the property to Raymond Hess in 1990. Raymond Hess owned the property until January 2000, when his son Randall Hess became the owner. Randall Hess uses the property as a residence for his family and farm animals. Donald Hess is not related to Raymond or Randall Hess.

The site property occupies approximately 15.69 acres. Nearly an acre of the property is devoid of vegetation and is about 85% covered with battery cores. The majority of the area of contamination is bounded by a gated fence and an on-site pond. There is a bike/snowmobile trail which lies on an abandoned railroad bed adjacent to the western shore of the on-site pond. There are fish in the on-site pond. Due to the high levels of metals found in the soil adjacent to the pond and in pond sediment, IDNR has asked the on-site residents to discontinue fishing from the pond until further notice. Furthermore, the on-site pond has been determined by IDNR to be a wetland. North of the pond are two building foundations from the former rendering works and the residence of Randall Hess and family. A drainage ditch is located west of the site which runs northwest. The ditch appears to be connected to ponds that are located north of the site. These ponds lie just across the driveway that leads to the site from Highway 52.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Hazardous substances as defined by Section 101 (14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, have been detected in the soil and sediment at the site. These include arsenic, lead, manganese, and zinc. The term release, as defined in CERCLA Section 101 (22), means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment. Information gathered by IDNR and EPA indicate that batteries have been transported to the site for some type of recovery process. The metal casings, chalky cores, and acidic solutions from the batteries were discarded on the surface soils where the salvaging may have taken place. During the October 1999 initial inspection, EPA observed and photographed an area of stressed vegetation in the area of crushed and discarded pieces of battery casings. Samples of the soils at the site demonstrate that lead has been released into the environment at a concentration up to 17,000 mg/kg. In addition to the actual release of this hazardous substance, the site also poses the threat of migration of lead off site.

5. NPL status

The site is not on nor is it proposed for the National Priorities List (NPL). The site was referred to the removal program by the site assessment program for an integrated removal and remedial site assessment investigation.

B. Other Actions to Date

1. Previous actions

Previous actions at the site include the IDNR Superfund Site Pre-CERCLIS Screening Assessment/Expanded Site Screening. The results of this assessment are described above.

2. Current Actions

The IDNR has referred the site to the EPA for an integrated assessment. Further sampling is being coordinated along with the removal to fully delineate the horizontal and vertical extent of contamination of the soil and the sediment.

C. State and Local Authorities Roles

1. State and local actions to date

There have been no known state or local actions taken since the IDNR Superfund Site Pre-CERCLIS Screening Assessment/Expanded Site Screening in July of 1999 to address or mitigate the release of lead.

2. Potential for continued state/local response

IDNR has referred the site to EPA for further investigation. IDNR and other interested state and local agencies will be kept informed as to the progress of the removal action.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Section 104 (a) of CERCLA, U.S.C. § 9604 (a), authorizes a removal response whenever any hazardous substance is released or there is a substantial threat of such a release into the environment. In addition, 40 C.F.R. § 300.415 (b) (1) provides that, whenever the lead agency makes a determination based on factors listed in 40 C.F.R. § 300.415 (b) (2) that there is a threat to public health or welfare, or the environment, the lead agency may take any appropriate removal action to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or the threat of release. The following is a discussion of the factors listed in 40 C.F.R. § 300.415 (b) (2) that apply to the site:

A. Threats to Public Health or Welfare

40 C.F.R. § 300.415 (b) (2) (iv) - - High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate.

Battery salvaging wastes containing high levels of lead and arsenic have been identified in the surface and subsurface soils at this site. Investigations have shown that soils on the site contain levels of lead as high as 17,000 mg/kg and arsenic as high as 270 mg/kg. Lead and arsenic contaminated soils may migrate via airborne dusts, surface runoff, groundwater drainage, and by children transporting soils/dusts after playing in the affected areas. The site is located in a flood plain identified as Couler Valley which further increases the potential of surface run off to aid transporting soils off-site. TCLP analysis also indicates that the lead is in a leachable form and that the soil will have to be treated and disposed of as a Resource Conservation and Recovery Act (RCRA) hazardous waste. TCLP results for lead were 16 mg/l compared to the RCRA standard of 5 mg/l.

40 C.F.R. § 300.415 (b) (2) (i) - - Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.

EPA investigations have documented the presence of lead and arsenic in soil and sediment on site. Lead and arsenic are hazardous substances.

Exposure to lead occurs primarily through ingestion and inhalation. Exposure to high concentrations of lead can cause the brain and kidneys of adults and children to be damaged. Lead exposure can cause increased blood pressure in males. Lead exposure in children can cause decreased

growth, hearing problems, and decreased intelligence (IQ) scores. If a pregnant woman is exposed to lead, it can be carried to the unborn child and cause premature birth, low birth weight, and even abortion¹.

The exposure threat posed by lead is dependent upon the concentration of contaminants, degree and type of exposure, and its reactivity to the individual. Young children are the most sensitive to lead toxicity effects. According to a report entitled "Preventing Lead Poisoning in Young Children" (published by the Centers for Disease Control, #99-2230, January 1985), lead in soil or dust exceeding concentrations of 500 to 1,000 parts per million (ppm) appear to be responsible for an increase in blood-lead levels above background in children. The Integrated Risk Information System, operated by EPA, lists lead as a B2 carcinogen (probable human carcinogen).

Exposure to arsenic also occurs primarily through ingestion and inhalation. Exposure to high levels of arsenic can cause decreased production of red and white blood cells, abnormal heart rhythm, blood-vessel damage, impaired nerve functions and increase the risk of cancer in the liver, bladder, kidney, and lungs.²

Direct exposure to the contaminated soils at the Former Frith Battery Dump site can cause numerous health-related problems through both acute and chronic exposure. The primary exposure pathway for these materials would be via ingestion of entrained particulates. To a lesser extent exposure could occur through inhalation of particulates in the air released by disturbances of the contaminated soils. The fish in the on-site pond are bottom dwellers and feed off of materials in the pond sediment. The sediment is contaminated with lead at least 3 to 4 feet off shore thereby affecting the food chain. There is a residence containing children located in close proximity (less than 100 feet) to the area of contamination. The wetland serves as an attraction and a habitat to migratory birds, snakes, turtles, and other animals.

B. Threats to the Environment

40 C.F.R. § 300.415 (b) (2) (ii) - - Actual or potential contamination of drinking water supplies or sensitive ecosystems.

The site contains a wetland which is a sensitive ecosystem. The sediments of the wetland are contaminated with lead at least 3 to 4 feet off shore thereby affecting the food chain. The Oil and Hazardous Materials Technical Assistance Data System³ states that both fish and animals are capable of concentrating lead, accumulating it in the bones. Therefore, lead has the potential to bioaccumulate in the food chain.

¹ U. S. Public Health Service, Agency for Toxic Substances and Disease Registry, Public Health Statement for Lead, June 1990.

² Toxicological Profile for Arsenic by U. S. Dept. of Health and Human Services, et.al.

³ A computerized database of information on chemicals which is operated by Chemical Information Systems, Inc., a subsidiary of Fein-Marquart Associates, Copyright 1985.

40 C.F.R. § 300.415 (b) (2) (v) - - Weather conditions that may cause hazardous substances or pollutants to migrate or to be released.

The compounds of lead released from salvaged batteries are generally more toxic due to their increased solubility. Soluble lead in excess of 2.0 mg/l in the soil can cause phytotoxic effects. Up to 1,632 mg/kg of the soluble lead concentrations in the top 12 inches of soil can be tolerated from the standpoint of plant accumulation and biomagnification.⁴ Analytical results from soil samples and the lack of a vegetative cover in the most severely contaminated areas of the site are evidence of phytotoxicity. Since the site is located in a flood plain, there is a high likelihood that these heavily contaminated soils are being washed into the on-site pond/wetland area during times of high precipitation or snow melt. The pond has a potential to impact the Little Macoqueta River which is a tributary of the Mississippi River. Flooding due to heavy precipitation or snow melt may cause these contaminated soils/sediment and battery cores to be washed into the Little Macoqueta River and carried downstream. The arsenic compounds are also water soluble and can settle into lakes, rivers, or ground water. Some of the arsenic will stick to the sediment on the bottom of the lake or river, and some will be carried downstream by the water.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

On-site stabilization treatment with off-site disposal will be the most effective and economically feasible method of mitigating the releases at the site. This removal action proposes to dispose of all soils exceeding the action levels of 1611 mg/kg and 31.1 ppm for lead and arsenic respectively. The action levels were calculated by an EPA toxicologist using EPA methodology for recreational adult exposure.

2. Contribution to remedial performance

An integrated removal/remedial assessment is on-going. Data collected during this removal will be used to determine the need for any post-removal activities.

⁴ Ibid

3. Description of alternative technologies

The actions proposed for the removal of the contaminant at this site represent the most timely and viable option for threat abatement.

4. Applicable or relevant and appropriate requirements

The National Oil and Hazardous Substance Pollution Contingency Plan 40 C.F.R. Part 300.415 requires that removal actions shall, to the extent practicable, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARS) under federal environmental, state environmental, or facility-siting laws. The following ARARs have been identified as being potentially applicable for this action:

Action/ Prerequisite	Requirement	Citation
Hazardous Waste Determination	To determine prior to disposal whether any waste materials resulting from the removal action are RCRA hazardous wastes.	40 C.F.R. § 261.4
Generation of hazardous wastes	RCRA standards applicable to hazardous waste generators	40 C.F.R. § 262 (Subparts A-D)
Transport of hazardous wastes	EPA Identification number; compliance with the manifest system and record keeping; hazardous waste discharges	40 C.F.R. § 263.11, 263.20, 263.21, 263.22, 263.30, 263.31
Site Worker Safety	Compliance to safety requirements for workers involved in hazardous waste operations and emergency response	29 C.F.R. § 1910.120
Packaging and shipping of hazardous materials	All hazardous materials must be packaged and shipped in a manner consistent by law.	49 C.F.R. § 173

By letter dated May 10, 2000, EPA requested that IDNR identify requirements that the state of Iowa wanted EPA to consider as potential state ARARs for this removal action.

5. Project Schedule

Based on the volume of contaminated soil estimate of 5,500 cubic yards (treated weight = 19,900 tons), the on-site treatment and off-site disposal is projected to take approximately 30 days. Soil will be treated to ensure universal treatment standards are met. Once universal treatment standards are met, the soil will be disposed at a Subtitle D landfill.

B. Estimated Costs

Cost estimates are based on an estimated volume of 5,500 cubic yards of contaminated soils.

Extramural Costs:

Regional Allowance Costs:

ERRS	\$ 555,000
START	\$ 160,000
Subtotal, Extramural Costs	\$ 715,000
Extramural Costs Contingency	<u>\$ 107,250</u>
TOTAL, EXTRAMURAL COSTS	\$ 822,250

Intramural Costs

Intramural Direct Costs	\$ 48,800
Intramural Indirect Costs	<u>\$ 101,260</u>
TOTAL, INTRAMURAL COSTS	\$ 150,060
TOTAL, REMOVAL PROJECT CEILING	<u>\$ 972,310</u>

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

The proposed time-critical removal action for the Former Frith Battery Dump Site should be taken. Should these actions be delayed, the potential threats to human health and the environment will continue and potentially increase as the contaminants spread by surface runoff, wind dispersion or entrainment.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with the Former Frith Battery Dump Site.

VIII. ENFORCEMENT ISSUES

There is an enforcement addendum for this site. For NCP consistency purposes, it is not considered a part of this action memorandum.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Former Frith Battery Dump site in Sageville, Iowa, developed in accordance with CERCLA and the National Contingency Plan (NCP). Conditions at the site meet the criteria for removal as set forth in the NCP at 40 C.F.R. § 300.415 (b) (2). I therefore approve the proposed removal action. The total project ceiling will be \$972,310. Of this, an estimated \$822,250 comes from the Regional removal allowance.

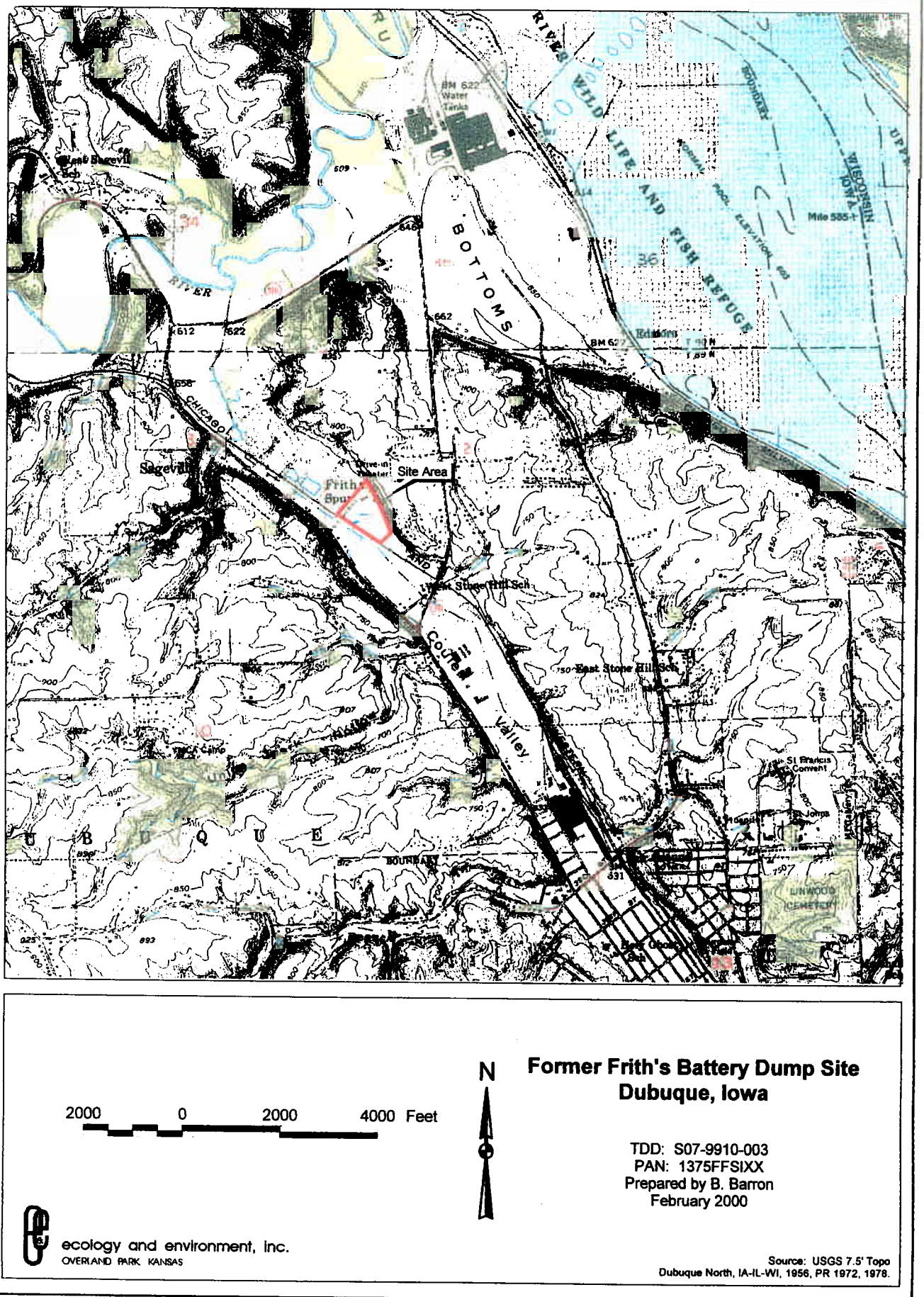
Approved:



Michael J. Sanderson
Superfund Division Director

7/7/00

Date



FRITH.APR

Figure 1: Site Location Map

Appendix B